FEDERATION OF RHODESIA AND NYASALAND.

DEVELOPMENT PLAN 1954-57

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COMMUNICATIONS AND TRANSPORT (Table 1 Item A).

Roads and Bridges.

The responsibility of the Federal Government is for those roads which were classified at the 1950 Johannesburg Conference on Transport as being inter-territorial roads in the three territories.

The volume of work to be done is great. Not only are great distances involved, as will be seen from the map shown as an Annexure to the plan, but also the existing roads no longer meet the needs of the community. For many years, therefore, expenditure on roads and bridges is likely to be substantial.

In the period under review the expenditure proposed is intended to bring inter-territorial roads to Class I or Class II standard,* according to the volume of traffic, thus following the aims of the original development plans of the territories.

In Southern Rhodesia construction work is being continued on the Umtali-Salisbury-Bulawayo-Beitbridge road, and on the Salisbury-Sinoia-Chirundu road. Work is to be commenced upon the Salisbury-Mtoko road, the main road to the Portuguese border and to Nyasaland. The present mileage of Federal roads is 1,345 miles, and up to the 30th June, 1954, some 629 miles have been reconstructed.

In Northern Rhodesia the width of tarred surface on the Copperbelt road (Ndola-Luanshya turn off - Kitwe-Chingola) is being increased from ten feet to twenty feet for some 94 miles, in order to allow for the increased density of traffic which has now reached the optimum which can be properly accommodated on the single lane bituminous surface provided. Other main inter-territorial roads upon which work will be continued are the Lusaka-Chirundu, Livingstone northwards, Lusaka-Broken Hill-Kapiri-Mposhi, Kapiri-Mposhi to Ndola and Kapiri-Mposhi to the Tanganyika border. The mileage of Federal roads is 1932 miles, of which, by the 30th June, 1954, some 688 miles have been reconstructed.

In Nyasaland, work is being carried out upon the Zomba-Limbe-Mlanje-Portuguese border road. The completion of this road means that the principal roads in the Southern Province which serve and connect the commercial centre of Blantyre and Limbe, the principal airport of Chileka, the administrative capital at Zomba and the main tea growing areas at Mlanje and Cholo will have been tarred.

A good road between Lilongwe and the railhead at Salima is essential. It is the main artery for the evacuation of the produce of the Central Province. The existing 71 miles of earth road is unsatisfactory and, in the rainy season, is often impassable to heavy traffic whose density averages 200 vehicles a day. Lilongwe is the centre of Nyasaland's tobacco industry. The majority of the crop is grown in the vicinity of Lilongwe but a centre existing at Kasungu, 100 miles to the north. Tobacco from this area and from Fort Jameson in Northern Rhodesia is conveyed over the road to Salima.

It is also/....

* A Class I road is a bituminous macadam surface, a ClassII road a gravel surface.

also intended to reconstruct the road from Fort Jameson to Lilongwe. The mileage of Federal roads is 1,072 miles, and at the 30th June, 1954, some 96 miles have been reconstructed.

Civil Aviation.

The following table illustrates the proposed expenditure upon airports:-

	1954/55 £	1955/56 £	1956/57 £
Salisbury new airport	250,000	100,000	-
Chileka airport.	40,000	50,000	37,000
Salima airport.	80,000	70,000	-
Bulawayo airport.	1	250,000	200,000
	370,001	470,000	237,000

The new Salisbury airport is some twelve miles from the Federal capital, and is to be used by both civil and military aircraft. At present it is only used by the Southern Rhodesia Air Force. The expenditure envisaged is to provide for earthworks, drainage, construction of taxi tracks and a hard standing area. A terminal building and ancillary work will also be constructed - the cost of these is included under the sub-head "General and Administrative Buildings" (Table 1, item G).

A token amount of £1 has been shown in the 1954/55 loan estimates in respect of a new airfield at Bulawayo, where the existing airport at Rumalo is unsatisfactory, with temporary runways unable to meet the requirements of modern aircraft. Consultants are at present engaged upon investigating a site and reporting on costs. It is expected the cost will be between £600,000 and £650,000 spread over the period 1955 to 1958.

Chileka airport was provided, by the end of 1951, with first class facilities, including runways and taxi tracks capable of taking medium capacity aircraft. The temporary air terminal erected in 1950 has proved inadequate to handle increased traffic, and the expenditure envisaged is for the construction of a permanent terminal building and ancillary buildings and taxi tracks.

The airstrip at Salima is a grass runway, and is usually unserviceable in the rainy season for aircraft over 5,000 lbs. weight. The development of tourism at the southern end of Lake Nyasa depends upon a good all weather airfield; apart from this factor, commercial and passenger traffic is likely to build up since Salima lies at the northern terminus of Nyasaland Railways, and at the southern end of the Fort Jameson-Lilongwe-Salima road. The all-weather airfield will also be an admirable alternate landing ground to Chileka airport.

Central African Airways Corporation.

The provision for Central African Airways, a statutory corporation serving the Federation, includes £280,000 as advances. This amount covers the cost of buildings required by the Corporation at the new Salisbury airport, e.g. hangars, passenger and cargo facilities, etc. £1,700,000 is to be raised as a loan by the Corporation under a guarantee by the Federal Government, and is to meet the cost of purchase of five Viscount aircraft at an estimated cost of £270,000 each, the balance being forancillary equipment and spares.

Posts and Telecommunications.

Development is aimed at improving and extending existing services. In all these territories new trunk telephone channels, exchanges and lines will be installed; in Nyasaland it is also intended to provide the Northern Province with a telephone service. The expenditure envisaged is solely for the purchase of engineering equipment. The costs of building construction for post offices or exchanges is included under the sub-head "General and Administrative Buildings" (Table 1, item G.).

Rhodesia Railways.

Since the nationalisation of the Railways in 1947, the Governments of Southern and Northern Rhodesia have provided the Railways with £37¾ mns of money for development.

The substantial growth of traffic has necessitated an enormous increase in rolling stock together with a major programme of improvements both to the track and terminal facilities.

The Rhodesia Railways' financial year is from the 1st April to the 31st March and the development expenditure for the years 1954/57 is set out in the following table. It will be noted that these differ slightly from the expenditure totals for each of the years as shown in the Federal Development Plan. This is because of the difference in the financial years, the expenditure in the Plan being related to the Federal Government's financial year :-

...../4

	1954/55 £	1955/56 £	1956/57 £	Total £
Traffic and operating facilities.	970,900	1,026,200	822,800	2,819,900
Passenger amenities	24,200	12,800	-	37,000
Housing : European	760,900	95,900	-	856,800
Housing : African	221,000	214,200	200,000	635,200
Renewal of Permanent Way.	318,500	373,600	363,400	1,055,500
Renewal of Bridges	105,800	44,100	23,000	172,900
Workshops, stores, etc.	171,000	181,200	151,800	504,000
Plant, Machinery & Equipment	286,300	334,400	68,100	688,800
Administrative & General Buildings	9,900	25,000	150,000	184,900
Road Motor Vehicles	10,000	63,000	63,000	136,000
Branch lines: extensions, deviations.	695,400	58,800	99,900	854,100
Land.	17,600	44,200	6,000	67,800
Water supplies.	305,100	180,000	57,400	542,500
Improvement Somabula-Bannockburn.	130,300	57,700	-	188,000
Locomotives and rolling stock.	2,840,000	986,500	1,108,500	4,935,000
South-East connection.	2,305,400	407,800	20,000	2,733,200
Other.	35,000	-	-	35,000
Total.	9,207,300	4,105,400	3,133,900	16,446,600
Add adjustment to cover quarter 1.4.57 to 30.6.57				618,400
Total expenditure in period of plan.				£17,065,000

Nyasaland Railways and Lake Service.

The expenditure involved in respect of the first phase of development of the Nyasaland and Trans-Zambesi Railways - which, for the purposes of the plan, have been included in the sub-head "Nyasaland Railways", is summarised in the following table.

	Nyasaland Railways. £	Trans-Zambesi Railways. £
Locomotives & Rolling Stock	250,000	300,000
Track Improvements.	35,000	32,000
Station Buildings & layout	44,000	22,000
Housing.	36,000	35,000
Water Supply.	-	20,000
Other (including contingencies)	42,000	91,000
	£407,000	£500,000

By com/

By far the majority of the development expenditure in respect of the two railways is devoted to the increase of their carrying capacity. For the rest a start is being made on a new programme of essential staff housing and on track improvements, particularly on the Northern Extension of Nyasaland Railways to facilitiate the use of more powerful locomotives. The provision made on this account will augment considerable expenditure from renewals reserve.

The amount provided under Lake Service is for the purchase of a Cargo steamer, two barges and a launch. The acquisition of a new steamer and barges will increase the carrying capacity of the lake service; the launch will facilitate more adequate supervision of the service.

Nyasaland Harbours.

Lake Nyasa forms the natural link between the north and south of the country; and it is proposed to develop the lake and the Nyasaland Railway system as a main artery of communication. At present, harbour facilities are primitive resulting in a slow turn round of lake vessels. With the exception of Chipoka, where the railway connects with the lake, no port has a wharf or jetty. A survey has been completed of other harbours on the lake, and better facilities are planned for Port Kota, Mlata Bay and Kaporo.

POWER (Table 1, item B).

Electricity.

This expenditure on electricity services in Nyasaland is for the completion of power stations at Limbe/Blantyre and Zomba. £118,000 has been provided for this, £83,700 relating to the 1954/55 financial year. The remaining provision is the Electricity Supply Commission of Southern Rhodesia, and will enable the Commission to complete its programmed expansion. The Commission is responsible for the supply of power within Southern Rhodesia outside the areas served by the Municipalities of Salisbury and Bulawayo. By 1955 its installed capacity will be 185 megawatts. One new project, a thermal station in the Eastern Districts of Southern Rhodesia, to meet the increasing demand for power in that area, is included in the provision, and by 1957, the installed capacity of the Commission will be 195 megawatts. This capacity is based on estimated demand and does not allow for any surplus power.

SOCIAL SERVICES. (Table 1, item C.).

Health.

The expenditure envisaged for buildings for the health services is considerable. The rapid increase in population, both African and European, has necessitated the expansion of hospital services; and the African himself has been, and is continuing to make, greater use of hospital facilities, thus creating additional pressure upon the existing services, which are insufficient to meet the demands of all races.

In Northern Rhodesia the major expenditure is for the construction of new hospitals at Kitwe, Lusaka and Livingstone. The Kitwe Hospital will cater for both Europeans

and /.....

and Africans, with some 50 beds for T.B. patients; the Livingstone Hospital is to be a General Hospital for Europeans. Two hospitals are to be constructed at Lusaka, one for Europeans and the other a mental hospital to provide, in the first instance, for African patients, and for European patients when the scheme is complete.

In Nyasaland a Group Hospital at Blantyre for Europeans, Africans and Asiatics is estimated to cost £750,000. £50,000 has already been spent on the project, and in the period of the plan an expenditure of £576,000 is anticipated, leaving a carry forward of £124,000 for the 1957/58 financial year.

In Southern Rhodesia, substantial expenditures have already been incurred in connection with African hospitals at Salisbury and Bulawayo, and a leprosy hospital near Fort Victoria. The estimated individual cost of construction of the African hospitalsis £670,000; £406,000 has already been spent on the Bulawayo hospital, £120,000 is provided in 1954/55, leaving £144,000 to be met in the remaining two years of the plan. The relative expenditures for the Salisbury hospital are £424,000, £120,000 in 1954/55, with £126,000 to be met thereafter. Both hospitals will have maternity, surgical and medical wards, out-patients departments and will be complete self-contained hospital units. The leprosy hospital is estimated to cost £20,000, of which £42,000 has been met, £23,000 is being provided in 1954/55, leaving £140,000 to be met in the succeeding years.

Other expenditure on health services is for hospitals and clinics throughout the Federation.

Education.

European education is the responsibility of the Federal Government. The proposed expenditure on schools and ancillary buildings is substantial. It must be remembered, however, that the increase in the European population since 1945 necessitates the provision of adequate educational facilities to meet the ever larger population of school age. Because of the lack of adequate facilities in Northern Rhodesia and Nyasaland, parents have found it necessary to send their children to South African schools, and grants to assist in children's schooling have been made by the Governments. It is more economic to provide schooling in the centres of population. In Southern Rhodesia, despite the new private schools, education establishments are insufficient to meet the demands made upon them, although the position is better than that existing in the Northern territories of the Federation. It is of interest, however, to observe that the emphasis in Southern Rhodesia is now upon more secondary school accommodation, whereas previously construction was centred upon primary schools.

In Northern Rhodesia the development of new mining townships produces additional demands for schools and may necessitate an even larger school building programme than at present envisaged for the Territory, in order to implement the policy of the Federal Government of building schools where the people live. The present construction programme includes seven secondary schools, seven primary schools, four infants' schools and five hostels. The secondary schools are being build at Lusaka, Mufulira, Luanshya, Ndola, Broken Hill, Chingola and Kitwe, and will provide in all for 500 boarders

and 5,000 day scholars. Primary schools to provide for 300 boarders and 2,100 day scholars are being erected at Chingola, Luanshya, Mufulira, Broken Hill, Lusaka, Livingstone and Kitwe, while the new infants' schools at Kitwe, Livingstone, Lusaka, and Luanshya will accommodate 1,200 day scholars. The carry over of works in progress is likely to be about £110,000 at the end of the 1956/57 financial year.

In Nyasaland the present facilities for primary education are quite inadequate. The buildings at St. Andrews' School, Blantyre, are insufficient to meet the influx of day and boarding pupils, who at present number 130 and 23 respectively. The cost of new buildings is estimated at £150,000.

Schools in Salisbury are estimated to cost £237,500, of which £67,000 has already been spent; a new hostel at Umtali for the Girls High Shool will cost £56,000.

Other expenditure is for additions to existing schools and the construction of other new schools in areas where the needs of the community are most pressing.

AGRICULTURE. (Table 1, item D.)

General.

An annual amount of £10,000 has been introduced to cover the purchase of earthmoving equipment by Intensive Conservation Area Committees, which are responsible for making assistance available for soil and conservation work in their areas. The balance of the provision in 1955/56 and 1956/57 is to meet the costs of Research Stations and a development farm.

Cold Storage Commission.

The proposed expenditure is for necessary additions and alterations to existing plant and buildings, the purchase of land and for grazing development.

Grain Marketing Board.

The proposed expenditure will complete the erection of storage for maize and small grains. The increased requirements of finance over the £293,400 shown in the original plan are mainly accounted for by £100,000 for the erection of storage and handling facilities at Bulawayo, a very suitable reserve point for the Federation, and increased costs of mechanical and other equipment.

Dairy Marketing Board.

The Board came into existence because of the failure of private enterprise to handle the distribution of milk adequately. The provision is for new dairies at Salisbury, Gwelo and Umtali and additional plant and transport.

MAJOR/.....

MAJOR SCHEMES. (Table 1, item H).

Hydro-Electric Power.

Provision is made for a hydro-electric project.

Shire Valley.

This scheme, in Nyasaland, provides for :-

(a) the control of the level of Lake Nyasa and the supply of water to the Shire River by the erection of a barrage on the Upper Shire;

(b) the use of the Middle Shire for generation of power;

(c) the irrigation of and reclamation of large areas of land mainly in the Lower Shire Valley.

The £21,000 provided in 1954/55 is for the balance of the costs of the survey in connection with the scheme. (See notes under "Miscellaneous", item "Contingencies".)

Sabi Valley.

There is at present a Research Station in the Sabi Valley where experiments are being conducted by Dr. Converse, an American agronomist. The proposed expenditure is in connection with a development farm and trainees. The project has as its aim increased food production under irrigation, but large scale expenditure is not contemplated until sufficient knowledge has been acquired about the potentiality of the low veld.

STATUTORY COMMISSIONS. (Table 1, item F).

Cotton Research and Industry Board of Southern Rhodesia.

Responsibility for the operation of the Board has been assumed by the Federal Government.

The provision is for a new cotton wool factory; the present factory sited on the Research Station is obsolete. The new factory will supplement production.

For extension of the Board's activities see "Miscellaneous" item "Contingencies".

Land and Agricultural Bank of Southern Rhodesia.

£250,000 for the Public Servants' Housing Fund and £500,000 forfarming needs have been estimated as the annual amounts of additional finance required by the Land Bank during the period of the plan.

MISCELLANEOUS (Table 1, item G).

General and Administrative Buildings.

Expenditure envisaged under this head covers a variety of building construction, e.g. post offices and exchanges, agricultural stations, civil aviation, customs houses and prisons. The greatestitem of expenditure is in respect of post offices

which in 1954/55, will cost approximately £380,000. In Northern Rhodesia the new post office and telephone exchange building at Lusaka is estimated to cost £200,000 over a period of three years. Provision is also made for new post offices at Broken Hill and Ndola in Northern Rhodesia, Gatooma in Southern Rhodesia and Limbe in Nyasaland, and additions to the main post office in Salisbury.

The provision in 1954/55 includes an amount of approximately £238,500 for housing for Federal purposes.

General.

This sub-head embraces a miscellany of items such as the purchase of land, either inside or outside the Federation, which is required for Federal purposes, funds for vocational training loans, and the costs of completing petrol storage installations.

Contingencies.

Provision is made under this heading for projects under investigation. These include the construction of a barrage in connection with the Shire Valley Scheme, a research station for agricultural purposes in Southern Rhodesia, a cotton mill in Nyasaland estimated to cost £1,500,000, and the financing of the second phase of the development programme of the Nyasaland Railways.

FINANCING OF THE PLAN.

The estimated expenditure in 1954-57 is £70.25 mns. and, with reimbursements to Territorial Governments and refinancing amounting to £5.33 mns, total estimated expenditure stands at £75.58 mns. If expenditure on hydro-electric schemes is excluded, this figure is reduced to £60.08 mns. Estimated available resources are shown at £30.03 mns leaving an amount of £30.05 mns. to be financed. In the determination of this latter figure, however, no account has been taken of loan monies for the years 1955/56 and 1956/57 which may be raised both internally and externally.

It is not possible, at this stage, to estimate the amount of loan finance available to meet the £30.05 mns referred to above. Firstly, external borrowings are controlled by the Loan Council established in terms of Section 88 of the Federation of Rhodesia and Nyasaland (Constitution) Order-in-Council, 1953; secondly, finance likely to be available and the attitude of investors in the future cannot be anticipated. As a general guide, however, it may be mentioned that the average annual amount secured internally and from London by the three Territorial Governments during the past two years has been £16¾ mns. These funds were, however, provided for Government services which remain with the Territorial Governments as well as for those which are being assumed by the Federal Government.

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TABLE No. 1

FEDERAL GOVERNMENT

DEVELOPMENT PLAN 1954 - 57

EXPENDITURES

Item	Service	1954/55 £	1955/56 £	1956/57 £	Total £
A	COMMUNICATIONS AND TRANSPORT	13,639,501	9,521,000	7,141,000	30,301,501
B	POWER	2,565,520	2,101,400	2,333,210	7,000,630
C	SOCIAL SERVICES	3,073,915	2,750,000	2,500,000	8,323,915
D	AGRICULTURE (including Stations)	960,000	292,000	272,500	1,494,500
E	MAJOR SCHEMES	1,530,000	7,029,000	7,018,000	15,577,000
F	STATUTORY COMMISSIONS (n.e.i.)	778,400	778,800	750,000	2,307,200
G	MISCELLANEOUS	1,521,786	1,825,000	1,900,000	5,246,786
	TOTAL	24,069,122	24,297,680	21,914,780	70,251,582
			Breakdown of above:		
A	COMMUNICATIONS AND TRANSPORT				
	Roads and Bridges	2,331,500	2,170,000	2,002,000	6,503,500
	Civil Aviation	370,001	470,000	237,000	1,077,001
	Central African Airways Corporation	270,000	1,710,000	-	1,980,000
	Posts & Telecommunications	833,000	900,000	1,200,000	2,933,000
	Rhodesia Railways	9,300,000	4,000,000	3,765,000	17,065,000
	Nyasaland Railways	395,500	29,500	-	425,000
	Lake Services	70,000	100,000	-	170,000
	Nyasaland Harbours	30,500	60,000	30,000	120,500
B	POWER				
	Electricity Services	2,565,520	2,101,400	2,333,210	7,000,630
C	SOCIAL SERVICES				
	Health : Buildings	1,163,222	1,250,000	1,500,000	3,913,222
	Education : Buildings	1,905,693	1,500,000	1,000,000	4,405,693
D	AGRICULTURE				
	General	10,000	65,000	65,000	140,000
	Cold Storage Commission of Southern Rhodesia	210,000	60,000	-	270,000
	Dairy Marketing Board of Southern Rhodesia	260,000	150,000	200,000	610,000
	Grain Marketing Board of Southern Rhodesia	442,000	17,000	7,500	466,500
E	MAJOR SCHEMES				
	Hydro-electric schemes	1,500,000	7,000,000	7,000,000	15,500,000
	Shire Valley	21,000	-	-	21,000
	Sabi Valley	9,000	29,000	18,000	56,000
F	STATUTORY COMMISSIONS				
	Cotton Research & Industry Board of Southern Rhodesia	28,400	28,800	-	57,200
	Land and Agricultural Bank of Southern Rhodesia	750,000	750,000	750,000	2,250,000
G	MISCELLANEOUS				
	General and Administrative Buildings	1,222,085	1,000,000	1,000,000	3,222,085
	General	299,701	125,000	100,000	524,701
	Contingencies	-	700,000	800,000	1,500,000

TABLE No. 2.

FEDERAL GOVERNMENT.

DEVELOPMENT PLAN 1954 - 57.

RESOURCES AVAILABLE.

	1954/55	1955/56	1956/57	Total
	£	£	£	£
(a) Ordinary.				
Revenue provision for Development	3,000,000	3,000,000	3,000,000	9,000,000
Loan from Southern Rhodesia Government equivalent to the 1954/55 receipts from the Federal National Grid Electricity Loan	1,414,000	-	-	1,414,000
Loan Repayments	500,000	550,000	600,000	1,650,000
Loan Raising (1)	3,250,000	-	-	3,250,000
Contributions by Southern Rhodesia [illegible] Payments	80,000	80,000	80,000	240,000
Colonial Development and Welfare etc	10,000	83,000	83,000	176,000
	8,254,000	3,713,000	3,763,000	15,770,000
(b) Special (Railways Reserves).				
Rhodesia Railways Pension Fund Contributions	600,000	450,000	-	1,050,000
Loan from Northern Rhodesia Government of an amount equivalent to the 1954/55 drawings from the International Bank Railways Loan	478,000	-	-	478,000
	1,078,000	450,000	-	1,528,000
(c) Loans under negotiation.				
External loans being negotiated by Federal Government	10,570,000	-	-	10,570,000
Central African Airways Corporation Aircraft Purchase Loan	170,000	1,530,000	-	1,700,000
Cotton Mill construction in Nyasaland	-	200,000	300,000	500,000
	10,740,000	1 730,000	300,000	12,770,000
Total (a + b + c)	20,072,000	5,893,000	4,063,000	30,028,000

(1) see note to Table No.3

TABLE No. 3.

FEDERAL GOVERNMENT.

DEVELOPMENT PLAN 1954 - 57.

FINANCING OF PLAN

	1954/55 £	1955/56 £	1956/57 £	Total £
(a) EXPENDITURE (see Table No.1)	24,030,[illegible]	24,297,680	21,914,780	70,251,582
(b) REIMBURSEMENTS				
In terms of section 5(4)(b) of the Order-in-Council (Constitution) for expenditure incurred by the Nyasaland Government prior to 1.11.53	581,000	-	-	581,000
In respect of expenditure incurred by the Northern Rhodesia Government on Federal works from 1.11.53 to 30.6.54	-	1,163,000	537,000	1,700,000
	581,000	1,163,000	537,000	2,281,000
(c) RE-FINANCING				
Excess expenditure over loan receipts to 30.6.54 financed by overdraft	1,752,000	-	-	1,752,000
Rhodesia Railways short-term loan from Northern Rhodesia Government	-	1,300,000	-	1,300,000
	1,752,000	1,300,000	-	3,052,000
∴ Total expenditure from loan account (a+b+c)	26,372,122	26,760,680	22,451,780	75,584,582
Total loan resources available	20,072,000	5,893,000(1)	4,063,000(1)	30,028,000(1)
∴ Total amount to be borrowed internally and externally (including hydro-electric schemes)	6,300,122	20,867,680	18,388,780	45,556,582
Deduct special finance for hydro-electric scheme	1,500,000	7,000,000	7,000,000	15,500,000
∴ Total amount to be borrowed internally and externally (excluding hydro-electric schemes)	4,800,122	13,867,680	11,388,780	30,056,582

Note: (1) During the past two years the average annual borrowing, internal and external, for the Federal area has been £16.75 mns.

No account of similar borrowings is included in 1955/56 and 1956/57.

RHODESIA AND NYASALAND

Scale 1:6,000,000

NORTHERN RHODESIA

SOUTHERN RHODESIA

NYASALAND

LAKE TANGANYIKA

LAKE MWERU

LAKE BANGWEULU

LAKE NYASA

Abercorn

Tunduma

Ft. Hill

Elizabethville

Jadotville

Kipiri M'Poshi

Ndola

Kitwe

Chingola

Mpika

Serenje

Mzimba

Ft Jameson

Solima

Lilongwe

Broken Hill

LUSAKA

Kafue

Kafue River

Zambezi River

From Tete

To Tete

To Mozambique

Ft Johnstone

ZOMBA

Limbe

Blantyre

To Quelimone

Milange

Mazoe

Mutobezi

Choma

Livingstone

Wankie

Zawi

Sinoia

Shamva

Mtoko

SALISBURY

Gatooma

Que Que

Gwelo

Umtali

To Beira

Bulawayo

Bannockburn

Ft Victoria

Shabani

Plumtree

West Nicholson

Under Construction

Beit Bridge

To Johannesburg

To Lourenco Marques

A.102

A.104

A.106

A.107

A.19

A.12

LUANGWA SWAMP

Inter-Territorial Roads.

INTER-TERRITORIAL ROADS THAT CROSS ONE BOUNDARY

North - South Roads.

A.12 Limbe - Milange - Quelimone.

West - East Roads.

A.19 Lilongwe - Solima - Mbamba - Lindi.

INTER-TERRITORIAL ROADS THAT CROSS MORE THAN ONE BOUNDARY

North - South Roads.

A.102. Bambari - Bangassou - Stanleyville - Costermansville - Jadotville - Elizabethville - Chingola - Kapiri M'Poshi - Lusaka - Kafue Bridge - Livingstone - Victoria Falls - Matetsi - Bulawayo - Lobatsi - Fourteen Streams - Kimberley - Three Sisters.

A.104. Nimuli - Busia - Nairobi - Iringa - Tunduma - Kapiri M'Poshi - Lusaka - Kafue Bridge - Salisbury - Bulawayo - Pretoria - Johannesburg - Bloemfontein - Three Sisters - Cape Town.

A.106. Tunduma - Lilongwe - Liwonde - Limbe - Blantyre - Tete - Salisbury - Beira - Lourenco Marques - Cetuane - Durban - Port Elizabeth - Cape Town.

West - East Roads.

A.107. Lobito - Nova Lisboa - Mucussueque - Dilolo - Jadotville - Elizabethville - Chingola - Kapiri M'Poshi - Lusaka - Lilongwe - Liwonde - Mandimba - Mozambique (Lumbo).

Scale 1:6,000,000

NYASALAND

NORTHERN RHODESIA

SOUTHERN RHODESIA

LAKE BANGWEULU

LAKE BANGWEULU MARSH

LAKE NYASA

Tunduma

Mpika

Mzimba

Chingola

Kitwe

Ndola

Serenje

Ft. Jameson

Solima

Lilongwe

Broken Hill

LUKANGA SWAMP

LUSAKA

Kafue

Kafue River

Zambezi R.

From Tete

To Tete

To Mozambique

Ft Johnstone

ZOMBA

Blantyre

Lumbe

Milange

To Quelimone

Shire R.

Mulobezi

Choma

Livingstone

Wankie

Zawi

Sinoia

Shamva

Mtoko

SALISBURY

Gatooma

Que Que

Gwelo

Umtali

To Beira

Bulawayo

Bannockburn

Ft. Victoria

Shoboni

Plumtree

To Kimberley

West Nicholson

Under Construction

Beit Bridge

To Johannesburg

To Lourenco Marques

A.102

A.104

A.105

A.106

A.107

A.19

A.12

Inter-Territorial Roads.

Federal Boundaries

Territorial "

Railways.

INTER-TERRITORIAL ROADS THAT CROSS ONE BOUNDARY

North-South Roads

A.12 Limbe - Milange - Quelimone.

West - East Roads

A. 19 Lilongwe - Salima - Mbamba - Lindi.

INTER-TERRITORIAL ROADS THAT CROSS MORE THAN ONE BOUNDARY

North - South Roads

A. 102 Bambari - Bangassou - Stanleyville - Costermansville - Jadotville - Elizabethville - Chingola - Kapiri M'Poshi - Lusaka - Kafue Bridge - Livingstone - Victoria Falls - Matetsi - Bulawayo - Lobatsi - Fourteen Streams - Kimberley - Three Sisters.

A. 104. Nimuli - Busia - Nairobi - Iringa - Tunduma - Kapiri M'Poshi - Lusaka - Kafue Bridge - Salisbury - Bulawayo - Pretoria - Johannesburg - Bloemfontein - Three Sisters - Cape Town.

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West - East Roads.

A. 107. Lobito - Nova Lisboa - Mucussuege - Dilolo - Jadotville - Elizabethville - Chingola - Kapiri M'Poshi - Lusaka - Lilongwe - Liwonde - Mandimba - Mozambique (Lumbo).